

# CCRC BRIEF

NUMBER 56

MARCH 2012

## Employer Perceptions of Associate Degrees: Information Technology Technicians in Detroit and Seattle

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Policymakers, educators, and the public agree that postsecondary credentials are crucial for economic success, and high school graduates and displaced workers are increasingly seeking credentials at community colleges. Yet little attention has been paid to understanding how credentials align with employer needs and how community college programs that lead to a credential can be more effectively aligned with local labor market needs.

This Brief, based on a study conducted by the Community College Research Center (CCRC), provides insight into employer perceptions of associate and bachelor's degrees relative to skills and qualities they seek in job candidates. Past investigations of the value of credentials have typically focused on earnings and have usually been conducted nationally or at the state level; they have rarely considered the specific qualities employers find valuable in credential holders or the role of local labor markets in shaping employer perceptions of credentials and of community college education. To help fill this research gap, the study reported here focuses on the employment needs and expectations of employers in two very different local labor markets: one in Detroit, the other in Seattle.

Specifically, we sought to demonstrate what it means for an associate degree to have value in the labor market by examining Detroit and Seattle employers' perceptions of it compared with the bachelor's degree in these two local labor markets that employ significant numbers of information technology (IT) technicians.

### The Case Study

To examine the value of credentials and their role in hiring decisions, we conducted comparative case studies examining how associate degrees were perceived in hiring IT technicians in Seattle and Detroit. Through document analysis and in-depth interviews with hiring managers, we elicited managers' views of associate and bachelor's degrees when hiring IT technicians and how these views matched the qualities

they sought in IT technicians. To ensure a mix of organizations within each labor market, employers were identified using a variety of criteria, including organization size, sector, and their existing relationships with community colleges.

### Information Technology Technicians

Among occupations for which community colleges prepare students, the IT technician occupation is particularly appropriate for a case study. IT technicians maintain basic computer and network operations in a wide range of organizational settings and are expected to be in high demand, with growth projected for both computer support specialists and network administrators (U.S. Department of Labor, 2010). Nearly all community colleges offer IT programs, and IT degrees are among the most common occupational degrees awarded by community colleges (U.S. Department of Education, 2008).

Despite the prevalence of community college IT programs, workers may enter IT jobs through a variety of pathways, including both associate and bachelor's degree programs, as well as through prior related work experience. In technical fields such as IT where standard hiring requirements have not been adopted by practice or regulation, the extent to which candidates' credentials are reviewed and valued in making hiring decisions is entirely up to the discretion of the employer. Prior research suggests that students in community college IT programs who earn an associate degree have better employment outcomes than those who just complete concentrated coursework in IT, controlling for student characteristics as well as work experience (Van Noy & Weiss, 2010). However, questions exist about the extent to which the associate degree helps these workers find employment (National Workforce Center for Emerging Technologies, 2006).

### The Local Labor Markets: Detroit and Seattle

The Detroit and Seattle labor markets were chosen for study because of relevant differences in their dominant industries and in the average education levels of their residents. Seattle's IT focus and Detroit's automotive manufacturing focus provide a contrast in terms of the dominant industry. While both labor markets experienced difficulties as a result of the Great Recession, Detroit has been facing much greater challenges that predated the national decline. With numerous layoffs and plant closings, the Detroit labor market has been struggling with a high unemployment rate and a large number of manufacturing workers who are seeking retraining in new fields. Seattle has

experienced a relatively stable if not prosperous economic climate overall. In keeping with the demands of their dominant industries, the average education levels in these two labor markets are markedly different: 36 percent of Seattle residents hold a bachelor's degree or higher, compared with 26 percent of Detroit residents (U.S. Census Bureau, 2006).

We examined Seattle and Detroit online job postings for two types of IT technician jobs—systems/networking and tech support—to ascertain the stated preferences of each with respect to educational credentials. The postings reflected differences in hiring practices in terms of educational credentials across the two labor markets. While educational credentials were not commonly mentioned on the postings in either Detroit or Seattle, the frequency with which they were mentioned varied substantially across the two. Employers in Seattle were more likely than those in Detroit to mention any education on their job postings and to seek workers with higher education credentials. Specifically, over one third of job postings for tech support positions in Seattle mentioned any education, compared with just over 10 percent in Detroit. Similarly, over 40 percent of systems/networking job postings in Seattle mentioned education while just under 20 percent in Detroit did so. Although overall the job postings did not frequently list educational credentials of any type in either labor market, those that did were more likely to mention a bachelor's degree than an associate degree. This finding supports the notion that the value of the associate degree for IT technicians is unclear and may not be as strong as the value of the bachelor's degree.

## Findings

### Qualities Expected in Credential Holders

Employers in the two labor markets reported that they expected to find several common qualities in both associate and bachelor's degree holders: technical skills and knowledge, thinking skills, communication skills, and discipline. Less frequently, they reported that they expected these credential holders to possess business knowledge, the ability to learn, organizational skills, thinking skills, commitment to a career, fit within the organization, maturity, motivation, and well-roundedness. Thinking skills were among the most important qualities employers in the two labor markets expected in both associate and bachelor's degree holders, as these skills were associated with the ability to troubleshoot logically and to better understand the nature of the job.

When speaking about both associate and bachelor's degree holders, hiring managers frequently expressed the idea that participation in postsecondary education is associated with stronger general thinking skills. One Detroit hiring manager commented that the more that individuals learn, the more open-minded they become and the better they become at analyzing problems. Seattle hiring managers echoed similar ideas about the associate degree, saying that it takes some intelligence and hard work to go to school. One Seattle hiring manager reported that having a bachelor's degree indicates that an individual possesses critical thinking skills.

Hiring managers in the two labor markets often expected both associate and bachelor's degree holders to have communication skills—pertaining to both speaking and writing—that would enable them to convey information effectively. A Seattle hiring manager suggested that technicians without a formal education tend to not communicate well.

Discipline, or the ability to complete an endeavor, was another quality that hiring managers in both labor markets expected to find among associate and bachelor's degree holders, since completing a degree demonstrated such. Indeed, for some hiring managers, attending school and completing either an associate or bachelor's degree indicated that the applicant possessed a strength in character that they thought was positive and valuable.

While fairly high numbers of employers reported that they expected to find technical skills in both types of credential holders, they were less likely to expect these skills in bachelor's degree holders (28 percent in Detroit and 31 percent in Seattle) than in associate degree holders (53 percent in Detroit and 57 percent in Seattle). Employers thought the bachelor's degree provided a deeper understanding of technology, whereas the associate degree provided graduates with immediate skills for work.

### Distinctive Qualities Expected in Associate Degree Holders

Employers expected certain qualities more often in associate degree holders than in bachelor's degree holders. In addition, there were a few positive and negative qualities—including hands-on skills, eagerness to prove themselves, and a lack of academic ability—that they expected to find nearly exclusively in associate degree holders.

While employers did not generally mention hands-on skills in connection with bachelor's degree holders, they often emphasized them in discussing associate degree holders. One hiring manager asserted that individuals with an associate degree are work ready, noting that they likely have hands-on experience through lab work, possibly in a simulated IT setting; understand theory and how networking works; and already know the fundamentals of the technical part of the job. Some hiring managers explicitly stated the difference in their expectations of each category of degree holder, indicating that individuals with a bachelor's degree do not have the same grasp of real-world skills as those who "got their AA in computer networking or something really applicable. The community colleges have some good hands-on programs."

The perceived difference about the existence of hands-on skills in associate degree holders compared with bachelor's degree holders is consistent with one of the key objectives of many associate degree programs at community colleges—the preparation of students for immediate work in technical fields—and with the often more applied nature of the curriculum in these programs. The perceived difference supports the idea that the associate degree is considered a credential designed to prepare people for work.

Employers also expected different attitudes toward

work among associate degree and bachelor's degree holders. A unique quality that hiring managers expected to find in associate degree holders was an eagerness to prove themselves because they may feel disadvantaged compared with bachelor's degree holders, particularly those from more elite schools. At the same time, hiring managers expected associate degree holders to have negative characteristics: a lack of academic ability, initiative, or skill that may have precluded attainment of a bachelor's degree; a need for direction and supervision; and shame for holding a lower status degree. An associate degree can be obtained in a shorter amount of time than a bachelor's degree and thus may imply acquisition of less skill, but employers also articulated other reasons for their negative perceptions. Pursuit of an associate degree indicated to some employers that an individual has shortcomings that additional education might not compensate for. Further, the degree suggested to some that the holder, "doing just the minimum amount required," might lack ambition or initiative.

Thus, rather than being a uniformly positive marker of skill and ability, for some hiring managers the associate degree carried negative connotations. One Seattle manager noted that in general this degree was considered less valuable than the bachelor's degree, and a Detroit manager commented that "a lot of people don't even want to tell you they've got an associate degree. They'll just say they went to school."

### **Qualities Sought in Workers But Not Expected in Credential Holders**

A key issue in understanding the value of credentials is how they align with the qualities employers seek in workers. When compared with the qualities hiring managers sought in technicians, the qualities they expected to find in credential holders were similar but limited in some key areas. Many of the qualities were exactly the same: the ability to learn, change, and follow directions; knowledge of business; communication, technical, and thinking skills; and motivation.

Hiring managers mentioned several qualities they sought in technicians but did not expect to find in credential holders by virtue of their credential: competency in customer service or the ability to work with users, personal interest in technology, and teamwork orientation. The managers considered the ability to understand the needs of the people who use IT in the organization to be important, and as one Seattle manager put it, workers "need to be a good 'culture' fit, meaning they embrace the idea of teamwork."

While credential holders might have these skills, across both labor markets hiring managers said that they were more likely to seek these qualities when hiring IT technicians than to expect to find them in holders of either the associate or bachelor's degree. Thus, they sought to identify potential workers with these qualities through means other than their educational credentials, such as by a review of their work experience. In fact, nearly a third of hiring managers in both labor markets reported that work experience was a key characteristic they sought when hiring technicians (30 percent in Detroit; 28 percent in Seattle). This finding highlights a

key issue: Educational credentials, while important, do not themselves guarantee labor market success. While the hiring managers believed that important qualities are associated with the successful completion of degrees, they did not strongly believe that degrees identify the all the traits and competencies they want in workers carrying out particular roles as technicians.

### **The Role of the Local Labor Market in Perspectives on Credentials**

Although employers across the two labor markets shared many key views about credential holders, some differences emerged. Hiring managers in Seattle and Detroit had different perceptions of associate degree holders linked to each area's unique labor market. Hiring managers in Detroit were more likely than those in Seattle to indicate that an associate degree signified commitment to a career in the given industry or occupation in which they obtained their degree (42 percent versus 11 percent). A Detroit hiring manager noted that the associate degree could help individuals make a career change. And, in fact, given the higher amount of structural economic change and worker displacement in Detroit because of the decline of the automotive industry, there were a large number of displaced workers looking for new careers, including in IT.

In contrast, Seattle hiring managers were more likely than Detroit hiring managers to indicate that an associate degree signified a lack of academic ability, initiative, or skill (46 percent versus 26 percent). An associate degree can stigmatize its holder by implying broad deficiencies when compared with a bachelor's degree. The particular labor market composition in Seattle, with a relatively high number of bachelor's degree holders, might account for the higher prevalence of negative views about associate degree holders.

The different views of associate degrees also may be related to differences in how hiring managers viewed community colleges. Seattle hiring managers were more likely than those in Detroit to view community colleges as an important resource that is workforce oriented (78 percent versus 48 percent), believing them to be good for technical fields, hands-on and specific instruction, and retraining. In contrast, Detroit hiring managers were somewhat more likely than Seattle managers to view community colleges as transfer oriented (54 percent versus 38 percent) and as less expensive and more affordable (46 percent versus 28 percent). One Detroit manager stated: "I think community college is a great way to get your first two years behind you." These views suggest that the Detroit hiring managers were more likely to believe that community colleges, rather than just functioning to provide specific training, confer credentials of value that can also lead to a bachelor's degree.

These perceptions may be explained by the particular context for higher education in the two labor markets. In the Seattle labor market, the view that community colleges provide workforce preparation supports the idea that the associate degree is a marker of immediate technical skill. Hiring managers in Seattle, with its relatively high overall level of educational attainment, viewed the associate degree as less likely to

indicate higher level thinking skills. They viewed community colleges as workforce oriented and potentially less likely to provide the kinds of thinking skills they were looking for.

In contrast, hiring managers in the Detroit labor market, with its relatively fewer bachelor's degree holders, saw community colleges as a less expensive way to enter higher education and as an attractive pathway toward a career. Community college completion demonstrated a commitment to a career. These perceptions in Detroit may reflect the idea that community colleges were viewed by many hiring managers there as more of an extension of the four-year university than as a lower status institution. While some Detroit hiring managers viewed the associate degree negatively, this was less common than in Seattle.

## Conclusion and Recommendations

Employers' views of the qualities they expected in credential holders and sought in technicians in the Detroit and Seattle labor markets provide several important insights for colleges.

Employers commonly expected both associate and bachelor's degree holders to have technical skills and knowledge, thinking skills, communication skills, and discipline. Community colleges should consider building on their strengths in these areas and should continue to emphasize the development of these competencies in their students.

The specific qualities that employers expected to find in associate degree holders provide an indication of how they valued this credential. While hiring managers believed that positive qualities were associated with the degree, they also expected some degree holders to possess negative characteristics. While it may be difficult for colleges to reverse widespread perceptions, they can increase their outreach efforts, cultivating stronger and more targeted relationships with specific employers interested in hiring their graduates. Colleges can promote the positive attributes of their students, such as their hands-on skills and their specific technical abilities, but fundamental changes in attitudes would likely require public relations campaigns on an institutional level.

Colleges can also develop strategies to help support students' pursuit of the bachelor's degree, given the reality that many employers may still prefer this credential. To facilitate their students' continued education, colleges may need to create more programs that have strong articulation agreements with both applied and traditional bachelor's degree programs.

Since there are certain qualities that employers did not expect to find in credential holders by virtue of their having earned that credential—such as customer service and teamwork abilities, and personal interest in technology—colleges might evaluate their programs to determine the extent to which their curriculum fosters these qualities. They might increase opportunities for

students to strengthen customer service and teamwork abilities through internships, work-based learning, or classroom-based activities that involve collaboration. Colleges can also conduct more direct employer outreach to demonstrate their students' value and to counter negative perceptions.

Another key finding of this study is that labor markets influence how employers perceive credentials and view community colleges. In markets where higher numbers of four-year degree holders are employed and where employers tend to hold less positive views of associate degree holders, community colleges may need to market their students and programs more aggressively. They may want to focus their outreach efforts on improving the perceptions of their institutions overall in addition to specific programs and credentials.

Ultimately, to ensure their students' success, community colleges need to be more proactive in understanding local employers' views of the degrees they offer and in fine-tuning their programs to make sure that they align with local labor market needs.

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Funding for this study was provided by the National Science Foundation's Advanced Technological Education Program. This Brief is based on CCRC Working Paper No. 39, titled *Employer Perceptions of Associate Degrees in Local Labor Markets: A Case Study of the Employment of Information Technology Technicians in Detroit and Seattle*, which is available for download free of charge at <http://ccrc.tc.columbia.edu>.

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